



City and County of the City of Chester.

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# ANNUAL REPORT

TO THE MAYOR, ALDERMEN AND  
COUNCILLORS OF THE CITY AND  
COUNTY OF THE CITY OF CHESTER

ON THE

## HEALTH OF THE CITY

IN 1932,

BY

D. RENNET, M.B.E., M.D., D.P.H.

(Retired September, 1932),

**Medical Officer of Health,**

Succeeded by

JAMES W. LOBBAN, M.A., M.D., D.P.H.

**To the Chairman and Members of the Public Health Committee.**

Ladies and Gentlemen,

In presenting this Report upon the Health of the City for the year 1932, it is opportune to make reference to the retirement from the position of Medical Officer of Health in September, of D. Rennet, Esq., M.B.E., M.D., D.P.H.

During Dr. Rennet's tenure of office far-reaching changes have taken place under his guidance in the Public Health Services of the City to the benefit of the Citizens. He was held in high esteem by the City Council, brother officials and the general public. It is gratifying to note that Dr. Rennet is continuing his active interest in the social services of the City.

The City Health Department also much regrets the loss by untimely death of their part-time officers—Dr. Jas. L. Browne and Dr. A. McMurray.

I am,

Yours obediently,

JAMES W. LOBBAN,

Medical Officer of Health.

## Public Health Committee (1931-32).

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Chairman - - - ALDERMAN W. CARR, M.B.E.

Deputy-Chairman - - - COUNCILLOR C. SCONCE.

### Members:

ALDERMAN S. R. A. WALL. COUNCILLOR J. W. MARRIOTT.

„ A. S. DUTTON. „ J. M. SIMON.

„ F. D. PRICE. „ R. W. DUNN.

COUNCILLOR S. R. FEARNALL. „ S. G. DUTTON.

„ I. S. FOX. „ KATE CLARKE.

„ J. C. DALTON. „ E. E. ASHTON.

COUNCILLOR ELIZABETH E. PENFOLD.

The Mayor (COUNCILLOR STANLEY GERRARD) is an *ex-officio* Member  
of all Committees of the Council.

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## Public Health Officers.

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### WHOLE TIME.

Medical Officer of Health, School Medical Officer, Medical Superintendent, Infectious Disease Hospital, and Tuberculosis Officer D. Rennet, M.B.E., M.D.,  
D.P.H.  
succeeded by  
James W. Lobban, M.A.,  
M.D., D.P.H.

Assistant Medical Officer of Health and Assist. School Medical Officer, etc. James W. Lobban, M.A.,  
M.D., D.P.H.  
succeeded by  
J. F. Galloway, M.D., D.P.H.

\*†Chief Sanitary Inspector, Food Inspector, Factory Acts Supervision S. H. Moore, F.S.I.A.,  
C.R.S.I.

\*†Assistant Sanitary Inspector, Food Inspector, etc. W. B. Calder, M.S.I.A.,  
C.R.S.I.

District Sanitary Inspector ..... J. Buckley, C.R.S.I.

Assistant District Inspector ..... H. J. Hewitt, M.S.I.A.

\*Housing Inspector ..... M. G. H. Tresidder, C.R.S.I.

\*Abattoir Superintendent ..... J. H. Withington, M.S.I.A.

## Public Health Officers—continued.

|  |  |
|--|--|
| Health Visitors, Maternity and Child Welfare, Tuberculosis, Care of the Blind and Mental Deficiency and School Nurse and respective Clinics<br>Each one for a district in the City | C. V. Rochford, C.M.,<br>C.R.S.I.<br>E. Brayne, C.M., G.T.<br>L. Robson, C.M., C.R.S.I.,<br>G.T.<br>A. E. Austin, S.R.N., C.M.<br>Z. K. Wilkins, S.R.N.,<br>C.M., H.V.C. |
| Chief Clerk .....  | F. Thomas.   |
| §Assistant Clerk .....   | T. R. Blythe, A.M.S.I.A.   |
| Assistant Clerk (Part time, School Medical) .....  | W. H. Wilkinson.   |
| Assistant Clerk and Laboratory Attendant (Part time, School Medical) ...   | A. H. S. Lewis.  |
| Medical Superintendent, City Hospital  | Jas. L. Browne, M.B., Ch.B.<br>succeeded by<br>J. R. Brodie Russell, M.B.,<br>Ch.B.  |
| Public Assistance Officer  | G. S. N. Hull.   |
| District Relieving Officers and Vaccination Officers .....   | F. Butler.<br>C. Brown.  |
| Matron, Isolation Hospital .....   | Miss L. Taylor, G.T.   |
| Matron, St. James's Hospital .....   | Miss Moss, G.T.  |
| PART TIME.   |  |
| Venereal Diseases Officers .....   | A. B. Paul, M.A., M.B., B.C.<br>J. N. Adam, F.R.C.S. (Edin.).<br>succeeded by<br>A. W. Holgate, M.S.,<br>F.R.C.S.  |
| Medical Officer, Maternity and Child Welfare Clinic<br>Medical Officer, Ante-Natal Clinic ....   | } Mary T. Place, M.B., Ch.B.,<br>D.P.H.  |
| School Dentist .....   | C. L. Wade, L.D.S.   |
| Public Vaccinator .....  | } R. A. D. Pope, B.A., M.D.  |
| Medical Officer, Public Assistance ...   |  |
| Consultant—Puerperal Fever, etc. ...   | A. McMurray, F.R.C.S.<br>(Edin.).  |
| Public Analyst .....   | Harold Lowe, M.Sc., F.I.C.   |
| Veterinary Surgeon .....   | H. H. Aldred, M.R.C.V.S.   |

† Certificate Royal Sanitary Institute, Meat and Food Inspection.

\* Certificate Liverpool University, Meat and Food Inspection.

§ Certificate Liverpool University, Sanitary Science.

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City and County of the City of Chester.

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# ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

For the Year 1932.



## STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

|  |          |
|--|----------|
| Area in acres .....  | 2,862    |
| Population (Registrar General) middle 1932 .....               | 41,350   |
| Number of inhabited houses, end of 1932, from Rate Books ..... | 9,967    |
| Rateable value .....   | £301,743 |
| Sum represented by a Penny Rate .....                          | £1,200   |

Chester is chiefly a business centre for the neighbouring parts of the Counties of Cheshire and Flint. There are no offensive or dangerous trades; the chief forms of employment being shop assistants, railway workers, engineers and tobacco workers. There is no evidence of undue illness in any particular form of employment.

The following are extracts from the vital statistics of the year:—

The population shows a decrease of 30 from 1931. Our rate of growth has considerably diminished. The decrease is almost entirely accounted for by former Chester residents who now live outside our boundary.

|               |              | Total. | M.  | F.  | Rate per<br>1,000 Population. |
|---------------|--------------|--------|-----|-----|-------------------------------|
| Live Births { | Legitimate   | 651    | 317 | 334 | } Birth-rate 16.5             |
|               | Illegitimate | 35     | 16  | 19  |                               |

Still-birth, rate per 1,000 total births ..... 39.2

Death Rate ..... 12.98

Deaths from diseases and accidents of pregnancy and parturition—

from sepsis ..... 0.024

from other causes ..... 0.072

Death rates of infants under 1 year of age—

All infants per 1,000 live births ..... 53.9

Legitimate infants per 1,000 legitimate births ..... 52.2

Illegitimate infants per 1,000 illegitimate births ..... 85.6



|   |       |
|---|-------|
| Deaths from Measles (all ages) .....        | 0.096 |
| Deaths from Whooping Cough (all ages) ..... | 0.096 |
| Deaths from Diarrhoea (under 2 years) ..... | 0.024 |

### THE BIRTH RATE.

The birth rate shows an increase from last year of 0.4, being 16.5 compared with 16.1 in 1931, which was the lowest on record.

The figures for the last five years are as follows:—

#### Birth Rates.

|      |       | England<br>and Wales. | Smaller<br>Towns. | Chester. |
|------|-------|-----------------------|-------------------|----------|
| 1928 | ..... | 16.7                  | 16.6              | 16.9     |
| 1929 | ..... | 16.3                  | 16.0              | 17.2     |
| 1930 | ..... | 16.3                  | 16.2              | 16.3     |
| 1931 | ..... | 15.8                  | 15.6              | 16.1     |
| 1932 | ..... | 15.3                  | 15.4              | 16.5     |

### STILL BIRTHS.

There were 31 still-births notified during the year, but only 28 of these belonged to Chester. The rate is 39.2 per 1,000 total births—live and still births together, or 0.67 per 1,000 population. In three cases only was it the first child which was lost, and in six cases there had been previous miscarriage or still birth. The apparent cause seems to have been ill-health of the mother 7, accident to mother 2, accident of parturition 4, abnormality of the child 2, and one case a twin pregnancy. In three cases no cause was ascertained.

### INFANT DEATH RATE.

The infant death rate is the lowest on record, 53.9. The chief causes of death were prematurity or debility, which accounted for 15 deaths, and pneumonia, which accounted for 12 deaths.

The position of Chester is shown in the following table:—

#### Infant Death Rates.

|      |       | England<br>and Wales. | Smaller<br>Towns. | Chester. |
|------|-------|-----------------------|-------------------|----------|
| 1928 | ..... | 65                    | 60                | 59       |
| 1929 | ..... | 74                    | 69                | 78       |
| 1930 | ..... | 60                    | 55                | 72       |
| 1931 | ..... | 66                    | 62                | 68.5     |
| 1932 | ..... | 65                    | 58                | 53.9     |

## GENERAL DEATH RATE.

The deaths of Chester residents numbered 537 during the year, 290 males and 247 females.

The death rate is 12.98 on the Registrar General's estimate of population. It was slightly lower in 1931, being 12.5.

There were nine deaths from the commoner infectious diseases:—measles 4, whooping cough 4, and diphtheria 1. There were no deaths from enteric fever, scarlet fever, or cerebo-spinal fever.

Influenza caused 9 deaths compared with 13 in 1931. There were 25 deaths from tuberculosis of the respiratory system, all but three being in age groups of 25 years and over.

Deaths from other tuberculous diseases dropped from 18 in 1931 to 3 in 1932. Deaths from cancer numbered 67 compared with 66 in 1931, while heart disease caused 112 deaths compared with 103 in 1931.

Deaths from respiratory diseases numbered 85 compared with 59 in 1931. Deaths from nephritis showed a decrease from 30 to 24.

As regards deaths in different age groups in comparison with 1931, the numbers under 15 years remain practically the same; from 15—45 there is a decrease; from 45—65 there is a slight increase; from 65—75 there is an increase, and from 75 upwards there is a decrease.

Our position as regards death rate is shown in the following table:—

|      |       | England<br>and Wales. | Smaller<br>Towns. | Chester. |
|------|-------|-----------------------|-------------------|----------|
| 1928 | ..... | 11.7                  | 10.6              | 10.5     |
| 1929 | ..... | 13.4                  | 12.3              | 14.38    |
| 1930 | ..... | 11.4                  | 10.5              | 13.4     |
| 1931 | ..... | 12.3                  | 11.3              | 12.5     |
| 1932 | ..... | 12.0                  | 10.8              | 12.98    |

The death rate is 0.48 per 1,000 greater than 1931.

Our death rates from infectious diseases are given in the following statement along with those for England and Wales and the smaller towns:—

|                   | Enteric Fever | Measles | Scarlet Fever | Whooping Cough | Diphtheria | Influenza | Diarrhoea<br>under 2 years<br>per 1,000 births |
|-------------------|---------------|---------|---------------|----------------|------------|-----------|--|
| England and Wales | 0.01          | 0.08    | 0.01          | 0.07           | 0.06       | 0.32      | 6.6  |
| Smaller Towns ... | 0.00          | 0.06    | 0.01          | 0.06           | 0.03       | 0.31      | 4.5  |
| Chester ...       | 0.00          | 0.09    | 0.00          | 0.09           | 0.02       | 0.21      | 1.4  |

Measles and whooping cough showed a slight increased proportion of deaths compared with the rest of the country, but diarrhoea, diphtheria, and influenza showed a less proportion of deaths.

The prevalence of these diseases in Chester compared with England and Wales is shown below.

Notification of infectious diseases per 1,000 population:—

|                   | Enteric<br>Fever. | Scarlet<br>Fever. | Diphtheria. | Puerperal<br>Fever. | Puerperal<br>Pyrexia. |
|-------------------|-------------------|-------------------|-------------|---------------------|-----------------------|
| England and Wales | 0·06              | 2·12              | 1·08        | 0·05                | 0·14                  |
| Chester ...       | 0·04              | 2·44              | ·58         | 0·02                | 0·31                  |

The case rates for puerperal fever and puerperal pyrexia are better expressed in relation to the births registered rather than to the population. When calculated on this basis the rates are:—

|                         | Puerperal<br>Fever. | Puerperal<br>Pyrexia. |
|-------------------------|---------------------|-----------------------|
| England and Wales ..... | 3·3                 | 8·5                   |
| Chester .....           | 1·4                 | 18·2                  |

Scarlet fever has been more prevalent than in the rest of the country as a whole, but this is explained by the epidemic which commenced towards the end of the year. The rate for puerperal fever is lower than the rest of the country, but the rate for puerperal pyrexia is higher. The latter may be due to increased watchfulness and more careful notification on the part of the medical profession.

The number of cases of diphtheria has decreased from 93 in 1931 to 24 in 1932; further mention of this will be made later in the report.

Puerperal pyrexia was notified on thirteen occasions during the year, and there were no deaths. One case was admitted to hospital. There was one notification of puerperal fever which was admitted to hospital and died. This case was a septic abortion, and was complicated with pyaemia and gangrene.

## GENERAL PROVISION OF HEALTH SERVICES IN THE CITY.

1.—PUBLIC HEALTH OFFICERS.—(see front page).

2.—NURSING IN THE HOME.

(a) The District Nursing Association has nurses employed in the nursing of patients in their homes. A large amount of valuable and highly appreciated work is done. Patients are referred to the Association by the Health Department as occasion arises.

(b) At times of epidemic sickness the Association helps in the nursing of such illnesses as measles and whooping cough, and for this service a fee of £50 per annum is paid by the Education Authority.

Details of the work done by the Health Visitors are given below:—

|   |     |
|---|-----|
| Total number of births notified .....                             | 836 |
| (of these 11 were notified late; 6 by doctors and 5 by midwives). |     |
| Cases attended and delivered by doctors .....                     | 121 |
| Cases attended and delivered by midwives .....                    | 715 |
| Number of still births .....                                      | 31  |
| (Midwives' cases 19, doctors' 12), 28 cases belonged to Chester   |     |

The Health Visitors made the following visits:—

|                                      |       |
|--------------------------------------|-------|
| Primary birth visits .....           | 660   |
| Return visits .....                  | 3,509 |
| Visits to children (1—5 years) ..... | 7000  |
| Visits to expectant mothers .....    | 678   |
| Other visits .....                   | 2896  |
| Visits to midwives .....             | 50    |

Of the 715 births attended by midwives, in 102 cases some condition arose requiring the calling in of medical help either for the mother or infant. This is a decrease of 5 from last year.

The reasons for requiring help were as follows:—

|   |    |
|---|----|
| Feebleness of child .....                 | 10 |
| Prolonged labour or malpresentation ..... | 10 |
| Complications before labour .....         | 20 |
| Complications during labour .....         | 22 |
| Complications after labour .....          | 14 |
| Rise of temperature .....                 | 5  |
| Discharge from the eyes .....             | 11 |
| Deformity of infant .....                 | 4  |
| Lacerated perinaeum .....                 | 11 |
| Abortion .....                            | 1  |
| Prematurity .....                         | 2  |
| Patient's own request .....               | 2  |

There were 31 still births registered in Chester during the year, particulars have been given earlier in the report.

#### MILK (MOTHERS AND CHILDREN) ORDER, 1918.

Milk has been supplied free to 2,529 applicants during the year, 111 more than in 1931. 112 of above number were first applications, the others were renewals.

#### NOTIFICATION OF BIRTHS ACT.

The number of births not notified until the omission was pointed out has decreased by 4 in the year.

## DENTAL CLINIC.

Nursing and expectant necessitous mothers are supplied with dentures through the dental clinic, either free or on part payment. This arrangement has not been taken advantage of during the year.

## THE SCHOOL CLINIC.

This is an important part of Public Health work, and here an endeavour is made to make parents realise and assume their responsibilities in the treatment of minor ailments. About a third of the work done here should be undertaken by the parents.

## BLIND PERSONS ACT, 1920.

The care of the blind in Chester has been delegated to the Chester Society for the Home Teaching of the Blind. The Local Authority has adopted a scheme for regulating the financial assistance given to them and their position has been improved during the year. A general supervision of the work of the Society in Chester is undertaken by the Local Authority and the homes of the blind visited and their comfort seen to as far as possible. The Local Authority have two representatives on the Committee of Management.

There were 77 persons on the register at the end of the year and the Local Authority paid to the Society £1,505 12s. 8d. in the year, and have estimated £1,439 for the current year. There have been 18 licences issued for wireless sets to blind people.

## 3.—MIDWIVES.

There are 22 midwives practising in the City, seven of which work under the auspices of the Benevolent Institution and Maternity Home, two doing outside work. All the midwives are certified and none are subsidised by the Local Authority. Their homes are visited quarterly, and registers, ante-natal records and home conditions examined by the senior health visitor. All midwives are seen, with their bags, registers and notes, once a year by the Medical Officer and on special occasions as necessary.

Under the provisions of the Midwives Act, the Local Authority paid the whole or part of the doctor's fee when called in by a midwife in 56 cases, an increase of 18 from last year.

Artificial Feeding.—The notification of the adoption of artificial feeding is very badly carried out, there having been only 14 such notifications received during the year.



## 4.—NATIONAL HEALTH INSURANCE.

Except in the certification of fitness or unfitness for work in patients suffering from tuberculous diseases and post diphtheritic conditions, there is no other connection with National Health Insurance.

## PUBLIC ASSISTANCE.

## (a) Out-Door Relief.

The amount of Out-Door Relief granted by the Public Assistance Committee for the year ended 31st December, 1932, was:—

Aged and Infirm Cases and Widows ..... £8089 10s. od.

Able-Bodied Cases ..... £772 10s. 6d.

The average number of recipients per week was as follows:—

|  | Men | Women | Children | Persons | Cases |
|--|-----|-------|----------|---------|-------|
| Aged and Infirm Cases and Widows ..... | 121 | 251   | 190      | 562     | 308   |
| Able-Bodied Cases .....                | 17  | 15    | 43       | 75      | 17    |

## (b) Institutional Relief.

## 1. The Public Assistance Institution, Hoole, Lane.—

The average weekly numbers in the Institution, Hoole Lane, were as follows:—

|                    | Men | Women | Children | Total |
|--------------------|-----|-------|----------|-------|
| City Cases .....   | 66  | 27    | —        | 93    |
| County Cases ..... | 6   | 5     | —        | 11    |
|                    | 72  | 32    | —        | 104   |

## 2. The City Hospital, Hoole Lane.—

The average weekly numbers in the City Hospital were as follows:

|                         | Men | Women | Children | Total |
|-------------------------|-----|-------|----------|-------|
| City Cases .....        | 42  | 44    | 24       | 110   |
| County Cases .....      | 7   | 12    | 4        | 23    |
| Mental Defectives Cases | —   | 21    | 12       | 33    |
|                         | 49  | 77    | 40       | 166   |

The Certified Mental Defective Patients are maintained in a separate Block attached to the Hospital, and 9 are City cases.

There were 760 patients admitted to the Hospital during the year, and 69 births. Patients discharged, cured or relieved 689. Deaths 160.

The highest number of patients in the Hospital on any one day was 210, including 35 Mental Defectives.



The highest number of children in the Hospital on any one day was 57.

### 3. Children's Home, Wrexham Road.

The average number of children in the Home during the year was 18, all City cases.

6. The Municipality has its own laboratory in which suspected material is examined sent by practitioners in the district or arising in the work of the infectious disease hospital or the municipal clinics. The work done in the municipal laboratory includes the examination of throat and nose swabs for detection of the diphtheria bacillus, or haemolytic streptococci, smears for the gonococcus, sputum for the tubercle bacillus or other organisms, blood counts or the examination of blood for the Widal reaction in suspected typhoid or the paratyphoid fevers, the examination of urine for various organisms, or for routine examination for the presence of sugar, albumen or blood.

In addition, samples of milk are examined bacteriologically every week, and those samples showing counts over the standard are the subject of advice or warning to the vendor or producer. In this way 140 or 150 milk samples are examined each year.

Fortnightly bacteriological examinations of the water supply are also made, each individual filter bed, the mixed waters, water from a consumer's tap, and from the River being examined.

A chemical examination of the water is made each month.

The following is a statement of the work done during the year:—

#### LABORATORY WORK, 1932.

| Material.      |            | Examined for             | Positive.      | Negative. | TOTAL. |
|----------------|------------|--------------------------|----------------|-----------|--------|
| Sputum ...     | ...        | Tubercle bacillus ...    | 106            | 150       | 256    |
| Swabs, Nose or |            |                          |                |           |        |
|                | Throat     | Diphtheria bacillus ...  | 45             | 464       | 509    |
|                | Eye ...    | Gonococcus ...           | 1              | 5         | 6      |
|                | Throat ... | Vincent's Angina ...     | 0              | 1         | 1      |
|                | Throat ... | Organisms ...            | 2              | 0         | 2      |
| Urine ...      | ...        | Routine ...              | 5 <sup>*</sup> | †19       | 24     |
|                | ...        | Paratyphoid bacillus ... | 0              | 4         | 4      |
| Blood ...      | ...        | Widal reaction ...       | 2              | 5         | 7      |
|                | ...        | Bacillus abortus ...     | 0              | 4         | 4      |
|                | ...        | Organisms ...            | 0              | 2         | 2      |
|                | ...        | Count ...                | 0              | †1        | 1      |
| Milk ...       | ...        | Tubercle bacillus ...    | 0              | 1         | 1      |
| Fæces ...      | ...        | Organisms ...            | 0              | 1         | 1      |
|                | ...        | Typhoid bacillus ...     | 1              | 3         | 4      |
| Smears ...     | ...        | Gonococcus ...           | 3              | 6         | 9      |
| Pus ...        | ...        | Tubercle bacillus ...    | 0              | 2         | 2      |
|                | ...        | Organisms ...            | 5              | 1         | 6      |
|                |            | Totals ...               | 170            | 668       | 838    |

<sup>\*</sup> Abnormal.

† Normal.

There has been a decided decrease in the number of specimens examined in 1932. The decrease is entirely due to the decrease in the number of cases of diphtheria during the year. In 1931 1169 swabs were examined for diphtheria, and in 1932 only 509.

In addition to the above the routine examinations of the City water supply and of samples of milk for bacteriological content were as follows:—

|  |     |
|--|-----|
| Routine chemical examinations of water .....               | 12  |
| Routine bacteriological examinations of water .....        | 237 |
| Routine examinations of milk for bacteriological count ... | 147 |

The water in the Public Baths was examined bacteriologically on two occasions during the year and found very satisfactory.

#### 7.—LEGISLATION IN FORCE.

List of Adoptive Acts, Bye-laws and Local Regulations in force in the District:—

Chester Improvement Acts, 1845, 1884.

Baths and Washhouses Act, 1846—1899.

Baths Bye-laws (1907).

Public Improvement Acts, 1860.

Houses and Parts of Houses Let in Lodgings Regulations, 1867.

Bye-laws as to Obstructions, Encroachments and Nuisances, 1879.

Bye-laws under the Dairies, Cowsheds and Milkshops Order, 1885, 1904.

Bye-laws in respect of Nuisances, 1887.

Public Health Acts Amendment Act, 1890.

Infectious Diseases (Prevention) Act, 1890.

Private Street Works Act, 1892.

Isolation Hospital Rules (1901).

Public Health Acts Amendment Act, 1907—Parts II., III., IV., V., VI. and X.

Bye-laws for the Regulation of Common Lodging Houses, 1909.

Bye-laws for the Regulation of Slaughterhouses, 1909 and 1922.

Public Health (Prevention and Treatment of Diseases) Act, 1913.

Rats and Mice (Destruction) Act, 1919.

Public Health (Tuberculosis) Act, 1921.

Bye-laws for the Regulation of Slaughterhouses provided by the Council, 1925.

Tuberculosis Order, 1925 (C.D.A.A.).

City of Chester (Measles and Whooping Cough) Regulations, 1925—S.R.O., 1925, No. 1130.

Public Health Act, 1925, except Sections 17, 18, 19, 20, 34 and 56.

City of Chester (Public Health, etc.) Order, 1926 (adopting Public Health Acts Amendment Act, 1907, and repealing certain Sections in Acts of 1845 and 1884.

Nursing Home Bye-laws (1928).

Chester Corporation Act, 1929.

## 8.—HOSPITALS.

(a)

| Name.                          | Situation.        |                  | Purpose.  | No. of Available Beds. | Pro-portion used by City Residents. | Management.      |
|--------------------------------|-------------------|------------------|---|------------------------|-------------------------------------|------------------|
| Chester Royal Infirmary        | City              | ...              | General   | 211                    | $\frac{1}{3}$                       | Voluntary Agency |
| City Hospital                  | ...               | City Boundary    | General   | 336                    | $\frac{5}{6}$                       | Local Authority  |
| Maternity Hospital...          | Centre of City... |                  | Maternity   | 8                      | $\frac{5}{9}$                       | Voluntary Agency |
| Cheshire Joint Sanatorium      | Market Drayton    |                  | Pulmonary Tuberculosis                                    | 250                    | $\frac{1}{30}$                      | Joint Committee  |
| Shropshire Orthopædic Hospital | Gobowen           | ...              | Non-Pulmonary Tuberculosis and other crippling conditions | 300 approx.            | $\frac{1}{18}$                      | Voluntary Agency |
| Isolation Hospital             | ...               | 1 mile from City | Infectious Diseases                                       | 64                     | $\frac{5}{6}$                       | Local Authority  |
| Tuberculosis Pavilion, Sealand | 1 mile from City  |                  | Advanced Tuberculosis and Non-Pulmonary Children          | 26                     | $\frac{5}{6}$                       | Local Authority  |
| Smallpox Hospital              | ...               | 1 mile from City | Smallpox  | 10                     | —                                   | Local Authority  |

The Nursing Staffs of the hospitals under the management of the Local Authority are composed as follows:—Chester City Hospital—One Matron, an Assistant Matron, Home Sister Seven Day Sisters, Two Night Sisters, 30 Probationer Nurses and 4 male (Uncertificated) Nurses. The Probationers finish their training at Birkenhead. Isolation Hospital and Tuberculosis Pavilion—Matron, Four Sisters, Two Staff Nurses and 14 Probationers. The Probationers finish their training at Monsall Hospital, Manchester. Smallpox Hospital—Staffed from Isolation Hospital when necessary.

The arrangement regarding the Medical Staffing and Consultants at the City Hospital are not yet complete. At the Isolation Hospital a Consultant from the Chester Royal Infirmary can be had when required.

(b) The location and amount of bed accommodation for various conditions is given where possible in the following table:—

|                       |     |     | Chester<br>Royal<br>Infirmary. | City<br>Hospital. | Chester<br>Maternity<br>Hospital. | Cheshire<br>Joint<br>Sanatorium. | Shropshire<br>Orthopædic<br>Hospital. | Isolation<br>Hospital<br>Chester. |
|-----------------------|-----|-----|--------------------------------|-------------------|-----------------------------------|----------------------------------|---------------------------------------|-----------------------------------|
| General Medical       | ... | M   | 14                             | 46                | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | 14                             | 31                | —                                 | —                                | —                                     | —                                 |
| General Surgical      | ... | M   | 57                             | 53                | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | 33                             | 46                | —                                 | —                                | —                                     | —                                 |
| Gynæcological         | ... | ... | 15                             | —                 | —                                 | —                                | —                                     | —                                 |
| Children              | ... | ... | 26                             | 32                | —                                 | —                                | —                                     | —                                 |
| Maternity             | ... | ... | —                              | 12                | 8                                 | —                                | —                                     | —                                 |
| Venereal Diseases     | ... | M   | 4                              | —                 | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | 4                              | —                 | —                                 | —                                | —                                     | —                                 |
| Tuberculosis Pulmon.  | ... | ... | —                              | —                 | —                                 | 8*                               | —                                     | 18                                |
| " Non-Pulmon.         | ... | ... | —                              | —                 | —                                 | —                                | †                                     | 8                                 |
| Chronic Sick          | ... | M   | —                              | 38                | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | —                              | 38                | —                                 | —                                | —                                     | —                                 |
| Mental Defective      | ... | ... | —                              | 40                | —                                 | —                                | —                                     | —                                 |
| Orthopædic            | ... | ... | —                              | —                 | —                                 | —                                | †                                     | —                                 |
| Ear, Nose and Throat  | ... | M   | 5                              | —                 | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | 5                              | —                 | —                                 | —                                | —                                     | —                                 |
| Ophthalmia Neonatorum | ... | ... | —                              | —                 | —                                 | —                                | —                                     | —                                 |
| Ophthalmic            | ... | M   | 6                              | —                 | —                                 | —                                | —                                     | —                                 |
| "                     | ... | F   | 6                              | —                 | —                                 | —                                | —                                     | —                                 |
| Infectious Diseases   | ... | ... | —                              | —                 | —                                 | —                                | —                                     | 64                                |
| Private Wards         | ... | ... | 22                             | —                 | —                                 | —                                | —                                     | —                                 |

\* Beds used by Chester Local Authority. † Beds given as required

### CHESTER ROYAL INFIRMARY.

The Royal Infirmary is fully staffed, with special departments in radiology, nose and throat, ophthalmology and gynaecology, and also for the treatment of cancer by radium. There are 211 beds. During the year a Psychiatric Clinic was opened and meets weekly on Thursdays at 3 p.m. Up to the end of the year 54 patients had attended, 12 of these being from Chester. The total number of attendances was 271, of which the Chester patients made 62. Beds required by the Clinic can be had by arrangement with the Honorary Medical Staff.

### THE CITY HOSPITAL (FORMERLY ST. JAMES'S HOSPITAL).

Unfortunately it has not been possible to arrange the re-staffing and equipment of this hospital. It has been agreed between the medical and surgical staffs of the Royal Infirmary and the City Hospital and the Medical Officer of Health, that medical and surgical cases not requiring expensive equipment for their diagnosis and treatment would be treated at the City Hospital and that medical practitioners would



be free to send patients to either hospital. It is hoped that in the development of the Hospital the claims of rheumatic and other ailing children will receive a large measure of attention. Those cases require beds for long periods which the Royal Infirmary are hardly in a position to supply. Preventive medicine also ought to figure largely in the programme of any municipal hospital. It ought to become a centre for the spread of health knowledge, showing films and giving talks on healthier living.

### ISOLATION HOSPITAL.

There are 64 beds for infectious diseases in four blocks of buildings, with 10 wards, and 18 beds for pulmonary tuberculosis (10 male and 8 female) and 8 beds for non-pulmonary tuberculosis in children.

There is also a discharge block and an efficient and up-to-date laundry and disinfecting station and a mortuary.

The staffing is efficient and comprises:—Matron, four Sisters, five staff nurses and 12 probationers with an adequate domestic and laundry staff, ambulance driver and engineer.

Three hundred and twelve patients were admitted during the year, 224 being Chester residents and 88 from neighbouring authorities.

The most noticeable feature of the year has been the remarkable reduction in the number of cases of diphtheria. This reduction is not confined to Chester alone, as the proportion of patients admitted from other authorities remains the same, namely, fifty per cent. Twenty cases were admitted from the City compared with 83 in 1931. There were no deaths. Nineteen cases were admitted from other authorities compared with 85 in 1931. Of these nineteen cases there were two deaths. There is still a tendency for patients to be admitted to hospital late in the disease and giving little hope of recovery.

Scarlet Fever.—Ninety-seven cases were admitted from the City compared with 59 in 1931 and 47 from outside districts compared with 68 in 1931. There has been a tendency to revert to the older, more serious type of scarlet fever particularly noted in the last quarter of the year, when an epidemic appeared. Complications were also relatively more frequent than in 1931. There was one death in a case from a neighbouring authority.

Measles.—Fifty-six cases of measles chiefly complicated by broncho-pneumonia were admitted during the year compared with one in 1931. Of these cases 53 were Chester cases and 3 from other authorities. There were three deaths, two from the City and one from a neighbouring authority.

Six cases of puerperal fever or puerperal pyrexia were admitted during the year—2 cases from Chester and 4 from other authorities. There was one death—a City case. The City cases have been commented upon already in this report.

Of a total of eleven cases of whooping cough admitted during the year, nine were Chester cases and the remainder from other authorities.

Three cases of typhoid fever were admitted from outside authorities and one of these cases died.

The remaining cases included one case of poliomyelitis from the City.

Six cases of scabies were admitted and treated during the year and 14 cases were treated as out-patients, in addition to three verminous children who were cleansed.

The following table gives details of the admissions:—

| 1932.                 | Tuber-<br>culous<br>Disease. | Scarlet<br>Fever. | Diph-<br>theria. | Typhoid<br>and<br>Para<br>Typhoid<br>Fever. | Puer-<br>peral<br>Fever<br>and<br>Pyrexia. | Whoop-<br>ing<br>Cough. | Measles | Other<br>Con-<br>ditions. | Total. |
|-----------------------|------------------------------|-------------------|------------------|---|--|-------------------------|---------|---------------------------|--------|
| Chester ...           | 28                           | 97                | 20               | ...   | 2  | 9                       | 53      | 15                        | 224    |
| County of<br>Cheshire | 7                            | ...               | ...              | ...   | ...  | ...                     | ...     | ...                       | 7      |
| Chester<br>R.D.C.     | ...                          | 13                | 8                | 1   | ...  | 1                       | ...     | 2                         | 25     |
| Tarvin and<br>Malpas  | ...                          | 13                | 5                | 2   | ...  | ...                     | ...     | ...                       | 20     |
| Hoole ...             | ...                          | 21                | ...              | ...   | 1  | ...                     | ...     | 1                         | 23     |
| Military ...          | ...                          | ...               | ...              | ...   | ...  | ...                     | ...     | ...                       | ...    |
| Other<br>Authorities  | ...                          | ...               | 6                | ...   | 3  | 1                       | 3       | ...                       | 13     |
| Total ...             | 35                           | 144               | 39               | 3   | 6  | 11                      | 56      | 18                        | 312    |

### 9.—CHESTER MATERNITY HOMES.

There are six maternity nursing homes in Chester, five of which also take other patients, the sixth is the Chester Maternity Hospital. These have been visited during the year and the registers examined. There have been no new applications and no cancellations. In addition to those, exceptional midwifery is done at the Chester Royal Infirmary. There are 12 maternity beds at the City Hospital, where this year there has been an increase of 50 per cent. on the number of cases delivered.

The Chester Maternity Hospital has 8 beds. This Hospital admitted 195 cases during 1932. No case of puerperal fever occurred during the year but four cases of pyrexia were notified.



There were two maternal deaths during the year. The first case was one of heart disease which died one hour after admission before delivery. The second case was one of long standing kidney trouble which was admitted for treatment prior to the time the confinement was due. She had a severe haemopotysis three days after admission and died.

There were three still births and four deaths in infants within ten days of birth. Three of the latter were due to prematurity, the fourth being due to injury in a very difficult complicated labour.

In the City Hospital 69 cases were delivered during the year. There was one case of puerperal fever and three of puerperal pyrexia.

One maternal death occurred during the year. This was a Caesarean Section case which developed a broncho-pneumonia and empyema thoracis.

#### 10.—MATERNAL MORTALITY.

Enquiry is made into the circumstances of all cases of puerperal fever or pyrexia including a statement from the doctor and nurse attending. The nurse in attendance is limited to the case until recovery or removal to hospital when she and her instruments are disinfected before returning to duty.

#### 11.—INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE CHILDREN AND HOMELESS CHILDREN.

Unmarried mothers may be admitted to the Chester Maternity Hospital or to the City Hospital. The only provision made for homeless children is through the Public Assistance Committee. Illegitimate children are kept under supervision and if not kept with the mother are subject to special care as to their homes and surroundings.

#### 12.—INSTITUTIONAL PROVISION FOR THE MENTALLY DEFECTIVE.

Chester is under the necessity of sending its mental defectives to whatever institution signifies a willingness to take a case. At the City Hospital there is a block for lower grade female cases and 34 defectives can be admitted. The Cranage Hall scheme has been modified. At present Chester has six higher grade female defectives there. Towards the end of the year there seemed to be less difficulty in placing our defectives, but the problem of the male defective is still an acute one.

### 13.—AMBULANCE FACILITIES.

Two ambulances are provided by the Town for general purposes, and are kept at the Fire Station where a driver is always available. For infectious diseases, two ambulances are kept at the Fever Hospital and also a van for the removal of infected bedding. The ambulance driver resides at the Hospital.

### 14.—CLINICS AND TREATMENT CENTRES.

The following clinics are administered by the Local Authority :—

|   | Situation.              | Accommodation.                                   |
|---|-------------------------|--|
| 1. Maternity and Child Welfare Clinic                           | Princess Street ...     | Waiting room, weighing room, and consulting room |
| 2. Ante-Natal Clinic ... ..                                     | „                       | Same   |
| 3. School Clinic (inspection) ...                               | „                       | „  |
| 4. School Clinic (treatment) ...                                | „                       | „  |
| 5. Ultra Violet Ray Clinic ...                                  | „                       | „  |
| 6. Tuberculosis Clinic ...                                      | St. John Street ...     | Waiting room and consulting room                 |
| 7. Venereal Disease Centre ...<br>(Joint with Flint & Cheshire) | Chester Royal Infirmary | Waiting room, treatment room, and ablution room  |

Under the auspices of the Cheshire Branch of the Red Cross Society and Society of St. John of Jerusalem a local Committee administer the

|                                 |                     |                                |
|---------------------------------|---------------------|--------------------------------|
| 8. Orthopædic After Care Clinic | St. John Street ... | Waiting room and Doctor's room |
|---------------------------------|---------------------|--------------------------------|

Some details of the work done in these Clinics are given below :—

(1) The Maternity and Child Welfare Clinic meets twice a week under the charge of a medical practitioner. The babies and older children are regularly weighed and records of progress kept. Where and when necessary they are seen by the doctor who advises the parents. Two of the Health Visitors attend each meeting and advise the mothers on various health matters.

The following attendances were made during the year :—

|                            | Number. | Attendances. |
|----------------------------|---------|--------------|
| Mothers .....              | 449     | 3336         |
| Babies .....               | 305     | 1740         |
| Children (1—5 years) ..... | 236     | 1865         |
| Babies .....               |         | 1714         |
| Children .....             |         | 1820         |

The following work was done by the medical officer of the clinic—

|  |     |
|--|-----|
| First visits of infants .....            | 270 |
| Subsequent visits .....                  | 812 |
| Children (1—5 years) first visits .....  | 115 |
| Subsequent visits .....                  | 711 |
| Mothers (post-natal consultations) ..... | 69  |

For weakly children and for those debilitated through whooping cough, cod liver oil has been supplied freely and has been very valuable. There is a growing interest and endeavour on the part of parents to feed their children correctly from the start and to follow intelligently instructions regarding diet and management.

(2) The Ante-Natal Clinic meets once a week under the charge of the same medical officer as the Child Welfare Clinic. Expectant mothers are examined and advised, and the midwife or doctor interested in the case is written to if not present. During the year the medical officer has seen 136 expectant mothers who have paid 262 visits. This represents an increase of 17 per cent. over last year and represents 19.8 per cent. of births. Midwives are taking more advantage of the Clinic. We have also sent to hospital some of those cases where home conditions were unsuitable as well as those cases requiring special treatment.

(3) The School Clinic (Inspection) meets every school day and is in charge of the Assistant School Medical Officer.

(4) The School Clinic (Treatment) meets on Tuesdays, Wednesdays and Fridays and is in charge of the same medical officer.

(5) Ultra-Violet Ray Clinic.

Total number attending during the year:—

|   |      |
|---|------|
| Children under school age .....               | 30   |
| Children of school age .....                  | 27   |
| Adults .....                                  | 3    |
| Total number of attendances made .....        | 1135 |
| Average number of attendances of each patient | 18.9 |

Summary of conditions of children under school age:—

|                               |    |
|-------------------------------|----|
| Debility .....                | 10 |
| Rickets .....                 | 8  |
| Malnutrition .....            | 5  |
| Bronchitis .....              | 3  |
| Tuberculous peritonitis ..... | 2  |
| Neck Glands (Non T.B.) .....  | 1  |
| Heart Disease .....           | 1  |

## Summary of conditions of school children:—

|                                      |   |
|--------------------------------------|---|
| General Debility .....               | 7 |
| Tuberculous neck glands .....        | 5 |
| Bronchitis .....                     | 4 |
| Tuberculous peritonitis .....        | 2 |
| Mentally retarded .....              | 2 |
| Asthma .....                         | 2 |
| Anaemia .....                        | 1 |
| Rickets (old) .....                  | 1 |
| Eneuresis .....                      | 1 |
| Lupus of scalp .....                 | 1 |
| Suspect pulmonary tuberculosis ..... | 1 |

## Summary of conditions of adults:—

|                               |   |
|-------------------------------|---|
| Tuberculous neck glands ..... | 1 |
| Tuberculous ankle joint ..... | 1 |
| Lupus of leg .....            | 1 |

As in previous years the results of treatment at the Ultra-Violet Ray Clinic continue to be very satisfactory. This is particularly noticeable in children under five. During 1932 many cases of debility following measles and whooping cough have been treated with definite gain in weight, appetite and general well-being.

With regard to the cases of tuberculosis, occasionally the neck glands are so advanced that abscess formation has appeared. These abscesses are opened and thoroughly scraped before irradiation. In these cases the end results have been very satisfactory. In cases which were seen in earlier stages the gland subsided after an extended course of treatment.

The results of treatment of school children have been commented upon in the School Medical Report.

(6) Tuberculosis Clinic meets on Mondays and Thursdays at 11 o'clock and on Thursday evenings at 6 p.m.

|  |     |
|--|-----|
| The number of patients on the Dispensary Register at the end of the year was .....                         | 125 |
| Number of new cases examined .....   | 50  |
| Number of contacts examined .....  | 18  |
| Number of attendances at the Dispensary .....  | 208 |
| Number of attendances at Cheshire Joint Sanatorium for refills in artificial pneumothorax .....            | 88  |
| Number of visits of Tuberculosis Officer to homes .....  | 36  |
| Number of " T.B. Plus " cases on the Register .....  | 99  |
| Number of visits of nurses to tuberculous persons (including those under the Tuberculosis Regulations) ... | 775 |

(7) Venereal Disease Centre meets at the Royal Infirmary on Mondays and Wednesdays at 5-7 p.m., and Saturdays 12—2 p.m., and is staffed by members of the Senior Staff of the Infirmary. The Clinic is open all day for irrigations and trained assistants are in attendance. The Clinic is a joint one for Chester and the Counties of Cheshire and Flint.

The number of patients treated at the Clinic are given below:—

|  | Syphilis |    | Gonorrhoea |    | Total |     |
|--|----------|----|------------|----|-------|-----|
|  | M        | F  | M          | F  | M     | F   |
| Number of Cases at beginning of year                   | 86       | 68 | 119        | 42 | 209   | 110 |
| Number attending for first time 1932                   | 34       | 23 | 120        | 24 | 154   | 47  |
| Ceased to attend or transferred to other centres ..... | 43       | 39 | 100        | 25 | 143   | 64  |
| Discharged .....                                       | 7        | 4  | 24         | 4  | 31    | 8   |
| Number under treatment at end of year .....            | 70       | 48 | 118        | 40 | 188   | 88  |

The following is the number of Chester patients attending for the first time during the year for the last five years:—

|                                | 1928 | 1929 | 1930 | 1931 | 1932 |
|--------------------------------|------|------|------|------|------|
| Syphilis .....                 | 22   | 12   | 16   | 19   | 22   |
| Soft Chancre .....             | —    | —    | 1    | —    | —    |
| Gonorrhoea .....               | 24   | 38   | 30   | 27   | 53   |
| Conditions other than venereal | 3    | 1    | 10   | 4    | 7    |

The number of attendances made by Chester patients was 3,460, and the number of in-patient days was 416.

(8) The Orthopaedic After-Care Clinic meets once a week when the cases are seen by the specialist staff of the Shropshire Orthopaedic Hospital. During the year 163 cases were under treatment and they made 1107 attendances. The distribution of the cases was as follows:—

|                              |    |
|------------------------------|----|
| Arthritis .....              | 5  |
| Congenital Deformities ..... | 20 |
| Claw Foot .....              | 3  |
| Flat Foot .....              | 12 |
| Hallux Valgus .....          | 1  |
| Injuries .....               | 5  |
| Knock Knees .....            | 10 |
| Osteomyelitis .....          | 3  |
| Poliomyelitis .....          | 14 |
| Rickets .....                | 37 |
| Round back .....             | 1  |
| Scoliosis .....              | 5  |
| Spastic diplegia .....       | 1  |



|                             |    |
|-----------------------------|----|
| Spastic hemiplegia .....    | 2  |
| Spastic monoplegia .....    | 1  |
| Spastic paraplegia .....    | 1  |
| Surgical tuberculosis ..... | 29 |
| Surgical tuberculosis ..... | 4  |
| Torticollis .....           | 1  |
| Others .....                | 16 |

I have to thank most cordially the Red Cross Society and the Society of St. John of Jerusalem, whose enthusiasm and help combine to make the clinic the success it is.

During 1932 there were 15 Chester patients sent by the Education Committee, Maternity and Child Welfare Committee, and the Tuberculosis Officer to the Shropshire Orthopaedic Hospital. These patients spent 1,542 in-patient days in hospital. The staff of the Orthopaedic Hospital co-operate with the Local Authority in the most helpful manner.

#### 15.—LOCAL GOVERNMENT ACT, 1929.

No further step has been taken to make a declaration under this Act.

### SANITARY CIRCUMSTANCES OF THE AREA.

#### WATER SUPPLY.

Chester continues to have an abundant supply of water of excellent quality. Since the introduction of modern methods of purification the standard of purity obtained has been remarkably good. The standard taken is the absence of typical *Bacillus Coli* from 100 c.c. of water.

On two occasions only during the year was typical bacillus coli found in the pure water reservoir at the Waterworks, whilst in no case was its presence observed in the water as supplied to the consumer.

These bacteriological examinations of the water are made at fortnightly intervals during the year. It is hoped that early in 1933 a 9,000,000 gallon storage reservoir will be in use which should further help in the purification of the water supply.

The water is also examined chemically every month, and has given satisfactory results. The results are as follows:—



## CHEMICAL EXAMINATIONS OF CITY WATER SUPPLY, 1932.

|  | Jan.        | Feb.        | Mar.        | April.           | May.             | June. | July.            | Aug.  | Sept.       | Oct.         | Nov.        | Dec.             |
|--|-------------|-------------|-------------|------------------|------------------|-------|------------------|-------|-------------|--------------|-------------|------------------|
| Colour ...   | faint green | faint green | faint green | very faint green | very faint green | Nil   | very faint green | Nil   | light green | faint yellow | faint green | very faint green |
| Opacity ...  | Nil         | Nil         | Nil         | Nil              | Nil              | Nil   | Nil              | Nil   | Nil         | Nil          | Nil         | Nil.             |
| Reaction ...   | Alk.        | Alk.        | Alk.        | Alk.             | Alk.             | Alk.  | Alk.             | Alk.  | Alk.        | Alk.         | Alk.        | Alk.             |
| Chlorides as Cl. ...                                 | 1.2         | 2.3         | 3.4         | 1.3              | 1.2              | 1.4   | 1.9              | 1.9   | 0.9         | 0.8          | 1.2         | 1.5              |
| Free Ammonia as $\text{NH}_3$ ...                    | .0054       | .0132       | .008        | .0132            | .002             | .006  | .0006            | .0024 | .002        | .0032        | .0013       | .0027            |
| Albuminoid Ammonia as $\text{NH}_3$ ...              | .0085       | .0065       | .0075       | .0150            | .009             | .010  | .0095            | .0134 | .018        | .0260        | .024        | .0045            |
| Oxygen absorbed in 3 hours at $37^\circ\text{C}$ ... | .270        | .058        | .062        | .251             | .258             | .188  | .130             | .0144 | .050        | .060         | 0.32        | .093             |
| Hardness—Temporary ...                               | 1.2         | 1.2         | 1.2         | 1.5              | 1.0              | 1.5   | 1.9              | 2.6   | .5          | 0.0          | 0.2         | 0.9              |
| Hardness—Permanent ...                               | 5.8         | 6.8         | 6.6         | 7.5              | 8.0              | 4.4   | 4.3              | 4.0   | 3.6         | 2.0          | 4.3         | 6.1              |
| Hardness—Total ...                                   | 7.0         | 8.0         | 7.8         | 9.0              | 9.0              | 5.9   | 6.2              | 6.6   | 4.1         | 2.0          | 4.5         | 7.0              |

The water supply is laid on to practically all houses in Chester. About 150 houses it is estimated are still without a separate and internal supply. These figures will be reduced in the near future by reason of work under the Housing Acts.

### RIVERS AND STREAMS.

The River Dee, the Shropshire Union Canal, and Finchett's Brook pass through the City. The order constituting a Joint River Board for the watershed of the Dee is still in abeyance owing to the present financial position.

Occasionally complaints are received of the uncleanness of the Canal at various points—dead animals, mattresses, etc., have been observed in the water. These matters have been dealt with as occasion necessitated.

### DRAINAGE AND SEWERAGE.

The new sewage works are under construction and it is hoped will be working to full capacity in the autumn of 1933.

### CLOSET ACCOMMODATION.

The only houses in Chester with earth or pail closets are a few beyond the sewered area, or too low to allow of drainage. The number does not exceed 40 and give little cause for complaint at the moment.

### SCAVENGING.

There is no change in the method of refuse removal and disposal, which is satisfactory.

### SANITARY INSPECTION OF THE AREA.

The following is a classified statement of the work done in the Sanitary Department during the year:—

|   |      |
|---|------|
| Complaints in respect of nuisances .....          | 154  |
| Visits in respect of nuisances .....              | 3948 |
| Rooms disinfected after Infectious diseases ..... | 308  |
| Investigations into Infectious Diseases .....     | 156  |
| Matters referred to City Surveyor .....           | 21   |
| Tests applied to drains .....                     | 257  |
| Number of premises—                               |      |
| drains found defective .....                      | 152  |
| drains repaired .....                             | 154  |
| insufficient drainage .....                       | 22   |
| drainage systems re-constructed .....             | 48   |
| Ashpits abolished .....                           | 10   |

|   |      |
|---|------|
| Ashbins provided .....                              | 649  |
| Inspection of Courts .....                          | 249  |
| Inspection of Schools .....                         | 38   |
| Inspection of Stables ,etc. ....                    | 21   |
| Inspections of Canal Boats .....                    | 114  |
| Inspections of Factories and Workshops .....        | 118  |
| Inspections of Daires, Cowsheds and Milkshops ..... | 157  |
| Inspections of Slaughterhouses .....                | 1723 |
| Inspections of Butchers Shops .....                 | 612  |
| Inspections of Fishmongers Shops .....              | 340  |
| Inspections of other food shops .....               | 585  |
| Inspections of Offensive Trade Premises .....       | 6    |
| Smoke observations .....                            | 20   |
| House to House District Inspections .....           | 137  |
| Visits to Common Lodging Houses .....               | 33   |
| Dwellings, Inspections and Re-inspections .....     | 4928 |
| Visits in respect of Rat Nuisances .....            | 1771 |
| Visits to Licensed Premises .....                   | 90   |

The following notices were served for the abatement of nuisances:—

|                  |     |
|------------------|-----|
| Intimation ..... | 667 |
| Statutory .....  | 32  |

### LEGAL PROCEEDINGS.

Proceedings were instituted in one case for failure to comply with a Statutory Notice served in respect of a defective and leaky roof. The defendant was ordered to execute the necessary repairs within seven days, and to pay five shillings costs.

### SMOKE ABATEMENT.

Industrial smoke does not constitute a serious problem in Chester, as many of the factories use either coal gas or electricity. The pollution of the atmosphere by smoke in the City is mainly from the domestic fires. In many of the older houses the type of grate installed does not suit the burning of smokeless fuel. Whilst many houses possess gas cookers, much cooking is yet done in the kitchen range and the fuel used being raw coal. So long as this class of fuel is used in the domestic fire we shall have atmospheric pollution. Gas and electricity are being used in a rapidly increasing number of houses, yet there does not appear to be any great demand for the smokeless coal fuel. A possible explanation of this may be that the production of this type of fuel has not reached a competitive standard as regards cost and distribution. Coke is a cheap smokeless fuel, but not greatly in favour of the house-

wife. A judicious mixture of coke and coal gives satisfactory results in addition to being economical. There have not been any really practical steps taken by the public to induce our legislators to deal seriously with the matter of domestic smoke, and although at present legislation may not be a matter of realisation, unexpected development may have the desired effect within a relatively short period.

In dealing with the smoke nuisance the activities of the Health Department are confined to nuisances arising by the emission from the chimneys of factories or workshops.

During the year 24 observations were made, but no nuisance recorded.

### **SPECIAL CLASSES OF PREMISES AND OCCUPATIONS SUBJECT TO CONTROL BY THE LOCAL AUTHORITY.**

No special action was necessary in regard to houses let in lodgings, tents, vans, or sheds. There is one offensive trade in the City, tripe dressing. This is not an extensive business and boiling takes place not more than twice weekly. The premises were kept in a reasonable sanitary condition.

### **COMMON LODGING HOUSES.**

The circumstances relating to common lodging houses are the same as last year. There are four such premises on the register, and the accommodation provides for 145 men. There is no common lodging house for women.

One of the common lodging houses was found to be in need of considerable structural repair. In several of the rooms new floors were required in addition to repairs to walls, etc.

The repairs had not been commenced at the year end, but instructions had been given in the matter and arrangements made to commence operations in the early part of 1933.

Thirty-three visits were made to these premises during the year.

### **RAG FLOCK ACTS.**

There are only two premises in which Rag Flock is used for the purposes of upholstery. The flock used is received from the same factory and purchased under warranty. The premises have been regularly inspected and found satisfactory.

## SANITARY CONDITION OF SCHOOLS.

In addition to the routine inspection of schools by the School Medical Officer, 38 visits have been made by the District Sanitary Inspector in respect of defects requiring remedy. After calling attention to the authority responsible for the maintenance of the buildings the necessary repairs have been carried out.

On the whole the sanitary condition of schools is satisfactory.

## HOMEWORKERS.

The homes of fifteen outworkers which were notified by employers to the Department have been visited by the Health Visitors. Eight of the presons were employed in tailoring and seven in the repairing of boots and shoes. The conditions of the homes were found to be satisfactory.

## PUBLIC CONVENIENCES.

The circumstances relating to public conveniences remain the same as last year. The City Engineer's Department is responsible for the cleansing and maintenance of the public conveniences and generally they are maintained in a satisfactory manner.

## LICENSED PREMISES.

Steady progress is being made in respect of the sanitary conveniences for use of the general public on these premises. Separate conveniences for the sexes is given particular attention. The living accommodation and the sanitary arrangements for the licensee also receive consideration. In the supervision of these premises 85 visits were paid. At the year end extensive sanitary amendments were in progress at one of the licensed premises. The improvements in this case included the provision of a bathroom and separate w.c. for the use of the licensee.

## CANAL BOATS ACTS, 1877—1884.

There was no change in the register of canal boats during 1932. There were 281 boats on the register at the year end. 114 boats were inspected, contraventions being found in respect of four boats. The nature of the contraventions is set out in the following supplement. There was no case of overcrowding reported. The boats inspected provided accommodation for 405 persons and the number occupying the cabins at the time of inspection was 369. Of these, 154 were males and 91 females, in addition to 66 children of school age and 58 under school age.



The following table shows the work done under the Acts:—

|   |     |
|---|-----|
| Number of Boats added to Register in 1932 .....               | —   |
| Number re-registered owing to Structural Alterations .....    | —   |
| Number re-registered for other reasons .....                  | —   |
| Total number registered to 31st December, 1932 .....          | 281 |
| Total number of Registrations Cancelled .....                 | —   |
| Actual number of Boats on Register at 31st December, 1932 ... | 281 |
| Number of Boats Inspected in 1932 .....                       | 114 |
| Number of Boats conforming to the Acts and Regulations .....  | 110 |
| Number of Boats infringing the Acts and Regulations .....     | 4   |
| Total number for which the Cabins were registered .....       | 405 |
| Total number occupying the Cabins .....                       | 369 |

Details of Occupation:—

|                                 |     |
|---------------------------------|-----|
| Male Adults .....               | 154 |
| Female Adults .....             | 91  |
| Children of School Age .....    | 66  |
| Children under School Age ..... | 58  |

Details showing numbers infringing in respect to:—

| Number of<br>Cases<br>met with. |  | Number of<br>Cases<br>Remedied |
|---------------------------------|--|--------------------------------|
| —                               | Registration .....   | —                              |
| —                               | Notification of Change of Master .....                     | —                              |
| —                               | Absence of Certificate .....                               | —                              |
| —                               | Certificate not identifying Owner with Boat .....          | —                              |
| —                               | Marking .....  | —                              |
| —                               | Overcrowding .....   | —                              |
| —                               | Partition (Regulation 8, b. ii.) .....                     | —                              |
| —                               | Females over 12 improperly occupying .....                 | —                              |
| 3                               | Cleanliness .....  | 3                              |
| 4                               | Painting .....   | 4                              |
| —                               | Ventilation .....  | —                              |
| 4                               | Dilapidation .....   | 4                              |
| 2                               | Removal of Bilge Water .....                               | 2                              |
| —                               | Without Pump .....   | —                              |
| —                               | Refusal of Admittance to Inspector .....                   | —                              |
| —                               | No proper Water Vessel .....                               | —                              |
| —                               | Without requisite Double Bulkheads .....                   | —                              |
| —                               | Non-notification of Infectious Disease .....               | —                              |
| —                               | Number of Boats detained for Cleansing (not for I/D) ..... | —                              |
| 13                              | Total Cases met with                                       | Total Cases remedied 13        |



|   |   |
|---|---|
| Number of Legal Proceedings taken .....     | — |
| Number of Printed Notice Forms issued ..... | 4 |
| Number of Notices attended to .....         | 4 |
| Number still corresponding about .....      | — |

### RATS AND MICE (DESTRUCTION) ACT, 1919.

In the early part of the year 1932 we were not troubled to any great extent by rats. It was noted during August that rats were beginning to establish themselves in suitable quarters for the winter. This invasion was much earlier than usual, October being the month generally noted for this migration in our district. Steps were taken to deal with the invasion immediately it was observed, and from the results obtained must be considered satisfactory. The first week of November was the time set apart for National Rat Week. For this week the Sanitary Staff was augmented and special attention was given to premises liable to infestation. The sewers throughout the City were baited with poison and the refuse tip was treated with poison gas. Subsequent inspection showed that the bait had been freely taken, and having knowledge of the efficacy of the poison used the result was most satisfactory. As in former years the public were invited to assist in the work of rat destruction and free poison bait was supplied and traps loaned on request. Apart from the number of rats caught in traps it is not possible to state the number of rats killed by other methods. There were 1736 rats caught in traps during the year.

The following table sets out details of the routine work of the rat-catcher during the year, but does not include Rat week.

| Month<br>1932.   | No. of<br>Visits. | Method. |        | Rats<br>Caught |
|------------------|-------------------|---------|--------|----------------|
|                  |                   | Poison  | Traps. |                |
| January ... ..   | 160               | 43      | 93     | 90             |
| February... ..   | 141               | 37      | 87     | 103            |
| March ... ..     | 148               | 25      | 113    | 163            |
| April ... ..     | 146               | 62      | 62     | 139            |
| May ... ..       | 132               | 46      | 58     | 148            |
| June ... ..      | 139               | 48      | 51     | 167            |
| July ... ..      | 132               | 38      | 70     | 121            |
| August ... ..    | 143               | 39      | 92     | 140            |
| September ... .. | 153               | 46      | 97     | 250            |
| October ... ..   | 128               | 29      | 90     | 135            |
| November ... ..  | 94                | 19      | 67     | 110            |
| December ... ..  | 154               | 36      | 100    | 170            |
| TOTAL ... ..     | 1670              | 468     | 980    | 1736           |

## HOUSING.

During the year 137 houses were inspected and recorded under the Housing (Consolidated) Regulations, 1925.

Of that number seventeen were found not to require attention and the remaining 120 were dealt with as follows:—

|   |       |
|---|-------|
| Repaired by Owners as a result of Informal Action ... | 66    |
| Being dealt with as Clearance Areas .....             | 47    |
| Individually unfit houses for demolition .....        | 7     |
|   | <hr/> |
|   | 120   |

The following houses have been demolished during the year under the Housing Act, 1930:—

1 and 3, Spital Walk, Boughton;  
2, 3, 4, 7 and 9, Richmond Court, Spital Walk;  
whilst the undermentioned houses which had previously been closed for human habitation have been demolished:—

1, 2, 3, and 4, Owens Court, St. Olave Street;  
2, 4, 6, and 8, St. Olave Street.

The houses mentioned below, although closed for human habitation, are still in abeyance in respect of Demolition Orders:—

2 and 3, Jones Court, Princess Street;  
2, 3, 4 and 5, Frances Court, Cuppin Street;  
1, Fluit's Court, Cuppin Street;  
13 and 14, Princes Court, Trafford Street.

The number of Statutory Housing Notices served varies according to the number of persons having control of such houses. In respect of 60 houses 193 notices were served, particulars of which are as follows:—

|  |       |
|--|-------|
| (1) Form A—Requests for names and addresses of persons having control or interest in dwellings ... | 77    |
| (2) Notice of intention to survey buildings .....  | 77    |
| (3) Form 4—Notice of question of making Demolition Orders .....                                    | 3     |
| (4) Form 5—Orders for demolition .....   | 28    |
| (5) Form 14—Notice to Owners, etc., of making Clearance Order .....                                | 8     |
|  | <hr/> |
| Total .....  | 193   |

## HOUSING STATISTICS.

1. Inspection of dwelling houses during the year—

- |   |      |
|---|------|
| (1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) ..... | 1395 |
| (b) Number of inspections made for the purpose .....  | 4928 |

|  |      |
|--|------|
| (2) (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 .....   | 137  |
| (b) Number of inspections made for the purpose .....   | 1645 |
| (3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .....   | 46   |
| (4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .....  | 1280 |
| 2. Remedy of defects during the year without service of formal notices:<br>Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers ..... | 1248 |
| 3 Action under Statutory Powers during the year:—  |      |
| A.—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930:—   |      |
| (1) Number of dwelling houses in respect of which notices were served requiring repairs .....  | nil  |
| (2) Number of dwelling houses in which defects were remedied after service of formal notices—  |      |
| (a) By owners .....  | nil  |
| (b) By local authority in default of owners .....  | nil  |
| B.—Proceedings under Public Health Acts—   |      |
| (1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied .....   | 32   |
| (2) Number of dwelling houses in which defects were remedied after service of formal notices—  |      |
| (a) By owners .....  | 32   |
| (b) By Local Authority in default of owners .....  | nil  |
| C.—Proceedings under sections 19 and 21 of the Housing Act, 1930:  |      |
| (1) Number of dwelling houses in respect of which Demolition Orders were made .....  | 7    |
| (2) Number of dwelling houses demolished in pursuance of Demolition Orders .....   | 7    |
| D.—Proceedings under section 20 of the Housing Act, 1930:—   |      |
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made .....   | nil  |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit .....  | nil  |

## E.—Proceedings under section 3 of the Housing Act, 1925 :—

|   |     |
|---|-----|
| (1) Number of dwelling houses in respect of which notices became operative requiring repairs .....  | nil |
| (2) Number of dwelling houses which were rendered fit after service of formal notices—  |     |
| (a) By owners .....   | nil |
| (b) By local authority in default of owners .....   | nil |
| (3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declaration by owners of intention to close ..... | nil |

## F.—Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—

|  |     |
|--|-----|
| (1) Number of dwelling houses in respect of which Closing Orders became operative .....  | nil |
| (2) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ..... | nil |
| (3) Number of dwelling houses in respect of which Demolition Orders became operative .....   | nil |
| (4) Number of dwelling houses demolished in pursuance of Demolition Orders .....   | nil |

**INSPECTION AND SUPERVISION OF FOOD.****(a) MILK SUPPLY.**

Within the City Area there are 13 milk-producers and their premises have been regularly inspected by the Sanitary Staff. The Corporation Veterinary Surgeon also visits each farm at least twice yearly for the purpose of inspecting the cattle. Milk producers in the City frequently call for the services of the Veterinary Officer in cases of doubt and in this way every care is taken of the milking stock.

During the year the Sanitary Inspectors made 157 visits for the purpose of inspecting shippens and dairy premises and their condition was found satisfactory.

There are 142 persons registered as milk sellers within the City and of these 67 persons have their dairy premises outside our area, the supervision of the latter being in the hands of the respective Authorities.

**CLEANLINESS OF MILK.**

During the past twelve months one hundred and forty-seven samples of milk have been examined bacteriologically in the Municipal

Laboratory, for the purpose of determining the cleanliness of the City milk supply. One hundred and thirty-four (91.16 per cent.) of the samples were found satisfactory, having a bacterial count of less than 200,000 germs per cubic centimetre.

It will be observed by comparison of previous years, as set out below, that the standard of cleanliness of the milk, although slightly better than 1931, is not quite so good as that of 1930.

| Year. | Percentage of Satisfactory Samples. |
|-------|-------------------------------------|
| 1927  | 89.2                                |
| 1928  | 88.4                                |
| 1929  | 75.8                                |
| 1930  | 91.7                                |
| 1931  | 87.5                                |
| 1932  | 91.16                               |

There are no practical difficulties in the way of producing a clean milk supply if simple rules for cleanliness are observed by producers. If the recommended methods for the production of a clean milk supply received earnest consideration there would be little cause for complaint. Contamination of the milk is due either to carelessness or indifference to the elementary principles of hygiene. Of the thirteen (or 8.8 per cent.) samples adversely reported upon, ten were found during the months of June to September.

The vendors, wholesalers, producers and medical Officers of Health of the districts in which the milk was produced were written to in each case as in former years.

*Bacillus Coli*, denoting manural contamination is still far too often found in the milk, only seventeen of the total samples (147) examined being free in both 1.0 c.c. and 0.1 c.c.

Producers must pay more particular attention to this matter. For their guidance a simple code of rules has been formulated, a copy being sent with letters calling attention to contamination. Copies of these instructions can be had free by milk producers on application to the City Health Department.

The following table sets out in detail the work done during 1932:



# BACTERIOLOGICAL EXAMINATIONS OF MILK, 1932.

| 1932.<br>MONTH. | GERMS PER 1 C.C. |                                 |                                  |                                  |                                    |                           |                    | Number<br>Letters<br>sent. | BACILLUS COLI.                 |   |                                  |
|-----------------|------------------|---------------------------------|----------------------------------|----------------------------------|------------------------------------|---------------------------|--------------------|----------------------------|--------------------------------|---|----------------------------------|
|                 | Under<br>50,000. | 50,000<br>and under<br>100,000. | 100,000<br>and under<br>200,000. | 200,000<br>and under<br>500,000. | 500,000<br>and under<br>1,000,000. | 1,000,000<br>and<br>over. | Total<br>Examined. |                            | Present in<br>10 c.c. or less. | Present in<br>10 c.c. absent<br>in 0.1 c.c. | Absent in<br>10 c.c. or<br>less. |
| January         | 12               | ...                             | ...                              | ...                              | ...                                | ...                       | 12                 | ...                        | 8                              | 3   | 1                                |
| February        | 13               | 1                               | ...                              | ...                              | ...                                | ...                       | 15                 | ...                        | 2                              | 9   | 4                                |
| March           | 3                | ...                             | ...                              | ...                              | 1                                  | ...                       | 4                  | 1                          | 2                              | 2   | ...                              |
| April           | 14               | ...                             | 2                                | ...                              | ...                                | ...                       | 16                 | ...                        | 9                              | 5   | 2                                |
| May             | 7                | 4                               | 1                                | ...                              | ...                                | ...                       | 12                 | ...                        | 8                              | 2   | 2                                |
| June            | 8                | 2                               | ...                              | ...                              | 2                                  | ...                       | 12                 | 2                          | 6                              | 3   | 3                                |
| July            | 8                | ...                             | 1                                | ...                              | 1                                  | 2                         | 12                 | 3                          | 7                              | 3   | 2                                |
| August          | 5                | ...                             | ...                              | 2                                | ...                                | 1                         | 8                  | 3                          | 6                              | 2   | ...                              |
| September       | 13               | 1                               | ...                              | 1                                | 1                                  | ...                       | 16                 | 2                          | 9                              | 6   | 1                                |
| October         | 14               | 2                               | ...                              | ...                              | ...                                | ...                       | 16                 | ...                        | 12                             | 3   | 1                                |
| November        | 10               | 3                               | 1                                | 2                                | ...                                | ...                       | 16                 | 2                          | 13                             | 2   | 1                                |
| December        | 5                | 3                               | ...                              | ...                              | ...                                | ...                       | 8                  | ...                        | 5                              | 3   | ...                              |
| Totals          | 112              | 16                              | 6                                | 5                                | 5                                  | 3                         | 147                | 13                         | 87                             | 43  | 17                               |
| Percentages     | 76.2%            | 10.88%                          | 4.08%                            | 3.4%                             | 3.4%                               | 2.04%                     | ...                | 8.8%                       | 59.2%                          | 29.3%                                       | 11.5%                            |

## CHEMICAL EXAMINATION OF MILK.

There were 33 samples of milk chemically examined of which three samples were below the prescribed standard for fat. Sample No. 21, which contained only 0.75 per cent. of fat was submitted informally by a householder, but a subsequent official sample obtained from the vendor proved to be up to the standard. Samples numbered 4 and 70 contained 2.90 per cent. of fat respectively. The Public Health Committee considered the circumstances in respect of those samples and instructed the Town Clerk to warn the vendors.

The improved quality of the milk referred to last year has been maintained. The average quality of the 33 samples was fat 3.66 per cent., solids not fat 8.81 per cent., as compared with 3.64 per cent. and 8.78 per cent. respectively in 1931.

The following table gives separate results of the analyses:—

| Date<br>1932. | Sample<br>No. | Fat<br>per cent. | Solids<br>not Fat<br>per cent. | Date<br>1932. | Sample<br>No. | Fat<br>per cent. | Solids<br>not Fat<br>per cent. |
|---------------|---------------|------------------|--------------------------------|---------------|---------------|------------------|--------------------------------|
| Jan. 19       | 1             | 3.85             | 8.85                           | June 24       | 47            | 8.30             | 8.50                           |
|               | 2             | 3.40             | 8.76                           |               | 48            | 3.22             | 8.80                           |
|               | 3             | 3.12             | 8.58                           |               | 49            | 3.30             | 8.62                           |
|               | 4             | 2.90             | 9.15                           |               | 50            | 3.36             | 8.88                           |
|               | 5             | 3.34             | 8.76                           |               | 51            | 3.80             | 8.70                           |
|               | 6             | 3.22             | 8.70                           |               | 52            | 3.04             | 8.60                           |
| Jan. 22       | 7             | 3.63             | 9.03                           | Sept. 8       | 66            | 5.02             | 8.52                           |
|               | 8             | 3.29             | 8.93                           |               | 67            | 3.23             | 8.71                           |
| April 4       | 21            | 0.75             | 8.81                           |               | 68            | 3.32             | 8.72                           |
| „ 5           | 22            | 3.10             | 8.70                           |               | 69            | 4.56             | 8.50                           |
| „ 6           | 23            | 3.12             | 8.50                           |               | 70            | 2.90             | 8.84                           |
|               | 24            | 5.30             | 8.80                           | Oct. 4        | 71            | 3.85             | 9.35                           |
|               | 25            | 4.03             | 9.07                           |               | 72            | 4.18             | 9.02                           |
|               | 26            | 4.04             | 9.10                           |               | 73            | 3.70             | 8.90                           |
|               | 27            | 3.27             | 8.73                           |               | 74            | 3.73             | 8.87                           |
|               | 28            | 3.47             | 8.75                           |               | 75            | 3.68             | 9.02                           |
|               |               |                  |                                |               | 76            | 3.97             | 9.13                           |

*Average* :—Fat = 3.66%. Solids not Fat = 8.81%.

Of the 120 samples examined three or 2.5 per cent. were certified to be “not genuine.” There were in that number 33 samples of milk analysed of which three or 9.09 per cent. were found to be deficient in Fat.

No legal proceedings were instituted under the Act.

The circumstances in respect of each of the samples adversely reported upon and action taken are set out in the following schedule:—

| No. of Sample. | Name of Article. | Result of Analysis.               | Remarks.   |
|----------------|------------------|-----------------------------------|--|
| 4              | Milk ..          | Deficient in 3.3 per cent. of Fat | As it was not possible to obtain a sample of milk "in course of delivery" to the vendor, the Public Health Committee called his attention to the result of the analysis. |
| 21             | Milk ..          | Deficient in 75 per cent. of Fat  | This sample was informally handed in by the purchaser. A sample obtained from the retailing producer subsequently proving satisfactory, no further action was taken.     |
| 70             | Milk ..          | Deficient in 3.3 per cent. of Fat | After considering the circumstances, the Public Health Committee instructed the Town Clerk to send a warning letter to the vendor.                                       |

### MEAT.

One registered slaughterhouse has been closed during the year, leaving five premises now used for slaughtering purposes in the City.

The closed registered slaughterhouses and adjoining buildings have been purchased by the Corporation for street improvement purposes and in due course will be demolished.

There now remains in the City only one registered slaughterhouse, privately owned, and three licensed Slaughterhouses, privately owned.

One registered slaughterhouse still in use, after being re-conditioned, has been let as a private slaughterhouse. The Public Abattoir in Queen Street, in the occupation of the City Council, is privately owned and the terms of the lease expire in 1935.

The slaughterhouses at present in use within the City are maintained in a satisfactory condition and do not call for any immediate action.

During the year 15,627 animals were slaughtered in the Public Abattoir, in comparison with 11,763 in 1931, an increase of 3,864 animals.

By co-operation with the butchers the slaughtering process has been effectually carried out without overcrowding. The work in connection with the Abattoir has been carried out smoothly.

The work of the Meat Inspectors is increasing to a conspicuous degree, as it is the invariable practice of many of the Master Butchers not to expose meat for sale to the public until it has been inspected and passed fit for food by the Inspectors.

There is still a considerable quantity of meat entering the City from the surrounding country districts for sale to the public, which has not been inspected or has been inspected in a perfunctory manner. In several instances where the carcasses of pigs have been brought into the City shops from rural districts and supposed to have been inspected,

generalised and localised tuberculosis has been found. In each case the attention of the rural Inspector concerned has been called to the matter.

The systematic inspection of food as practised in the City clearly indicates that insufficient attention is given to the inspection of meat, intended for food, in rural districts. This inattention considerably increases the work of the Meat Inspectors in the City.

During the year 1932 it was found necessary to make formal seizure of food in two instances. The first of these was in respect of five sheeps' livers and two sets of sheeps' lungs. This edible offal was from animals slaughtered outside the City and was being offered for sale to a local meat trader at a time when one of the Meat Inspectors happened to be on the premises. Proceedings were instituted in this case and the defendant was fined two pounds. The second seizure related to fourteen tins of loganberries which were found to be unsound. In this instance the Public Health Committee decided to issue a warning to the Vendor.

Meat Marking continues to be carried out at the Public Abattoir and is evidently appreciated by the Meat Traders.

All animals slaughtered within the City are first stunned by mechanically operated instruments. The inspectors regularly examine the instruments and see they are kept in good working order.

During the year the following animals were slaughtered in the Public Abattoir:—

|              |              |
|--------------|--------------|
| Cattle ..... | 1365         |
| Calves ..... | 634          |
| Sheep .....  | 11831        |
| Pigs .....   | 1797         |
| Total .....  | <u>15627</u> |

For the purposes of food inspection the following visits were made:—

|  |             |
|--|-------------|
| Slaughterhouses (not including Abattoir) | 1723        |
| Butchers' Shops .....                    | 612         |
| Fishmongers' Shops .....                 | 340         |
| Other Food Shops and Stores .....        | 585         |
| Total visits .....                       | <u>3260</u> |

At the Abattoir, the Superintendent, who is a qualified Meat Inspector, is in regular attendance and he assists the Inspectors in the inspection of the meat dressed on the premises.

The following is a list of the food condemned during the year:—

| ARTICLES CONDEMNED.                 | Number. | REASON FOR CONDEMNATION.       |
|-------------------------------------|---------|--------------------------------|
| <b>BEEF.</b>                        |         |                                |
| Carcases and offal... ..            | 17      | Generalised Tuberculosis       |
| Organs or portions of carcasses ... | 232     | Localised Tuberculosis         |
| " " ...                             | 151     | Parasitic & other conditions   |
| <b>MUTTON.</b>                      |         |                                |
| Carcases and offal ... ..           | 17      | Oedema                         |
| " " ... ..                          | 2       | Febrile                        |
| Carcase and offal ... ..            | 1       | Accident during parturition    |
| Organs or portions of carcasses ... | 509     | Parasitic and other conditions |
| <b>PORK.</b>                        |         |                                |
| Carcases and offal ... ..           | 15      | Generalised Tuberculosis       |
| " " ... ..                          | 7       | Febrile                        |
| Carcase and offal ... ..            | 1       | Jaundice                       |
| Organs or portions of carcasses ... | 521     | Localised Tuberculosis         |
| " " ... ..                          | 31      | Parasitic and other conditions |
| <b>VEAL.</b>                        |         |                                |
| Carcase and offal ... ..            | 1       | Febrile                        |
| <b>MISCELLANEOUS.</b>               |         |                                |
| Frozen Lamb (carcase) ... ..        | 1       | Brine stained                  |
| " " (portions of carcasses) ...     | 4       | Decomposed                     |
| Ox Tongue (tin) ... ..              | 1       | "                              |
| Jellied Veal (tin) ... ..           | 1       | "                              |
| Loganberries (tins) ... ..          | 14      | "                              |
| Rabbits (frozen carcasses) ...      | 36      | "                              |
| Labdor Salmon (cases of) ...        | 2       | "                              |
| Flukes (box) ... ..                 | 1       | "                              |
| Cod fillets (boxes) ... ..          | 24      | "                              |
| Cured Codling (boxes) ... ..        | 3       | "                              |
| Salmon ... ..                       | 1       | "                              |

Estimated weight of food stuffs condemned :—11 tons, 1qr., 1lb.



**DISEASES OF ANIMALS ACTS, 1894 to 1925.****TUBERCULOSIS ORDER, 1925.**

As noted last year the improvement in the class of animal brought for sale in the City Saleyards has been maintained during 1932.

It was found necessary to deal with twelve animals during the year. Eight of these were found in the City Saleyards and four in shippens within the City.

Notices were served on the owners of seven of the animals to return them from the saleyards to their farms, and due notice of such transfers was given to the Authorities of the areas concerned so that necessary action could be taken. The Ministry of Agriculture and Fisheries was also notified.

The remaining five animals were slaughtered under the supervision of the Corporation Veterinary Surgeon and the Meat Inspectors. In each case the animals were found to be affected with advanced tuberculosis and compensation was paid to the owners in accordance with the terms of the Order.

Two samples of milk submitted for biological examination did not produce tuberculosis in the test animal.

The Corporation Veterinary Surgeon has inspected the dairy stock in the cowsheds within the City on at least two occasions during the year. He has also made special examinations on request and attended the cattle saleyards on sale days (Tuesdays and Thursdays) for the purposes of making inspections under the Order.

**WHOLESALE DEALERS IN MARGARINE AND MARGARINE CHEESE.**

The number of Registered Dealers remains the same as last year, and their premises on inspection were found to be satisfactory.

**FRIED FISH SHOPS.**

There are thirty-four shops in which this trade is carried on. The premises have been regularly inspected and found satisfactory.

# FOOD AND DRUGS (ADULTERATION) ACT, 1928.

The following articles were submitted to the Public Analyst for analysis:—

## FOOD AND DRUGS (ADULTERATION) ACT, 1928.

| Article.                  | Samples Taken | No. formally. | No. informally. | No. Genuine. | No. not Genuine. |
|---------------------------|---------------|---------------|-----------------|--------------|------------------|
| Milk ... ..               | 33            | 32            | 1               | 30           | 3                |
| Ice Cream ... ..          | 6             | ...           | 6               | 6            | ...              |
| Butter ... ..             | 4             | 4             | ...             | 4            | ...              |
| Peas ... ..               | 4             | ...           | 4               | 4            | ...              |
| Rice ... ..               | 4             | ...           | 4               | 4            | ...              |
| White Pepper ... ..       | 3             | ...           | 4               | 4            | ...              |
| Margarine ... ..          | 3             | 3             | ...             | 3            | ...              |
| Condensed Milk ... ..     | 3             | ...           | 3               | 3            | ...              |
| Cream ... ..              | 3             | ...           | 3               | 3            | ...              |
| Jams ... ..               | 3             | ...           | 3               | 3            | ...              |
| Tea ... ..                | 3             | ...           | 3               | 3            | ...              |
| Sweets ... ..             | 3             | ...           | 3               | 3            | ...              |
| Fruit Wine ... ..         | 3             | ...           | 3               | 3            | ...              |
| Self-Raising Flour ... .. | 3             | ...           | 3               | 3            | ...              |
| Apples ... ..             | 3             | ...           | 3               | 3            | ...              |
| Mincemeat ... ..          | 3             | ...           | 3               | 3            | ...              |
| Olive Oil ... ..          | 2             | ...           | 2               | 2            | ...              |
| Baking Powder ... ..      | 2             | 2             | ...             | 2            | ...              |
| Ground Ginger ... ..      | 2             | 2             | ...             | 2            | ...              |
| Coffee ... ..             | 2             | 2             | ...             | 2            | ...              |
| Sultanas ... ..           | 2             | 2             | ...             | 2            | ...              |
| Mixed Dried Fruits ... .. | 2             | 2             | ...             | 2            | ...              |
| Custard Powder ... ..     | 2             | ...           | 2               | 2            | ...              |
| Lard ... ..               | 2             | ...           | 2               | 2            | ...              |
| Sardines ... ..           | 2             | ...           | 2               | 2            | ...              |
| Camphorated Oil ... ..    | 2             | ...           | 2               | 2            | ...              |
| Tomatoes (tinned) ... ..  | 2             | ...           | 2               | 2            | ...              |
| Fish Paste ... ..         | 2             | ...           | 2               | 2            | ...              |
| Port Wine ... ..          | 2             | 2             | ...             | 2            | ...              |
| Rum ... ..                | 2             | 2             | ...             | 2            | ...              |
| Whisky ... ..             | 2             | 2             | ...             | 2            | ...              |
| Turpentine ... ..         | 1             | ...           | 1               | 1            | ...              |
| Turpentine Mixture ... .. | 1             | ...           | 1               | 1            | ...              |
| Currants ... ..           | 1             | 1             | ...             | 1            | ...              |
| Tongue (cooked) ... ..    | 1             | ...           | 1               | 1            | ...              |
| Luncheon Sausage ... ..   | 1             | ...           | 1               | 1            | ...              |
| Totals ... ..             | 120           | 56            | 64              | 117          | 3                |

I append the report of the City Analyst for the year:—

To the Chairman and Members of the Public Health Committee.

Mr. Chairman, Ladies and Gentlemen,

## SALE OF FOOD AND DRUGS (ADULTERATION) ACT.

I have the honour to submit my report for the past year. During the year I received one hundred and twenty samples for analysis, as follows.

33 samples of milk, 4 pepper, 4 rice, 4 peas, 4 butter, 3 margarine, 2 olive oil, 2 camphorated oil, 1 turpentine mixture, 1 turpentine, 6 ice cream, 2 baking powder, 2 coffee, 2 ground ginger, 3 condensed milk, 3 cream (tinned), 2 sultanas, 2 mixed dried fruit, 1 dried fruit (currants), 3 tea, 3 jam, 3 sweets, 2 custard powder, 2 lard, 3 fruit wine, 3 self-raising flour, 2 fish paste, 3 apples, 2 port wine, 2 rum, 2 whisky, 3 mincemeat, 1 luncheon sausage, 1 tongue, 2 tomatoes (tinned), 2 sardines.

Three samples of milk were found to be adulterated, one of these was taken informally by a private purchaser and was found to be 75 per cent. deficient in fat, but on further samples being taken by the Inspector it was found that the milk being supplied was genuine.

Another milk sample was 3.3 per cent. deficient in fat, and a slight deficiency was found in another sample, the amount of fat present being 2.9 per cent., while the minimum standard is 3 per cent.

None of the milk samples contained preservatives, and none contained dirty sediment.

Ice cream still varies much in composition, the amount of fat varied from  $2\frac{1}{2}$  per cent. to 11.2 per cent., and cornflour, while absent in some samples, was the chief ingredient in others.

The tinned creams contained the usual relatively small amount of fat; a standard for cream is long overdue.

In no case was Boric Acid found as a preservative, but Sulphites and Benzoic Acid were present in dried fruits, sweets, jam and non-alcoholic wine, in all the amounts were well within those allowed by the regulations.

I am,

Your obedient Servant,

HAROLD LOWE,

City Analyst.

## CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.

The chemical examination of food is done by the City Analyst in his own laboratory, and the purity of various articles reported upon. The bacteriological examination of milk is done in the Municipal Laboratory. In cases of suspected food poisoning, samples of the suspected food and other material are sent to Medical Department, Ministry of Health.

## NUTRITION.

Opportunity has been taken to address various organisations both on questions of nutrition and prevention of disease. In this time of great unemployment and hardship it is gratifying to see that the nutrition and well-being of the children are not suffering.

**PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.**

## GENERAL.

The year has been remarkable on account of the diminution in the number of cases of diphtheria—only 24 were notified during the year, compared with 93 in 1931.

Measles and whooping cough provided respectively 656 cases and 261 cases. Where necessary cases were removed to the Isolation Hospital. Fortunately, relatively few complications were encountered in these diseases. There were 4 deaths from measles and 4 from whooping cough.

There was an epidemic of scarlet fever in the last quarter of the year. The total number of cases for the year was 101, compared with 59 in 1931. There were no deaths.

It was decided to cease the notification of chicken pox in September, and up to that time 130 cases had been notified.

The campaign against diphtheria has been continued. The procedure was the same as in 1931, except that Schick testing was confined to children over 10 years of age, instead of seven years as formerly. This was decided upon in view of the fact that the percentage of Schick positive children between the ages of seven and ten was so high.

During the year 425 children have been immunised with or without Schick Testing and 83 were found Schick negative.

There were no cases of cerebo-spinal fever during the year. There was a slight increase in the number of cases of pneumonia, 68 compared with 65 in 1931.

## CLEANSING AND DISINFESTATION OF VERMINOUS PERSONS AND THEIR BELONGINGS.

A shampoo station is freely used for the cleansing of heads of school children. In cases of body vermin, which are fortunately few, they are treated at the Disinfecting Station at the Isolation Hospital, where clothes and bedding are also treated. Occasionally we are asked to deal with an adult, who is dealt with in a similar fashion.

## THE POSITION AS REGARDS VACCINATION.

The present position is frankly unsatisfactory. The present legal requirements of vaccination are of no great value and are expensive. The population is rapidly becoming unprotected against smallpox, and it is certain that repeal of the Vaccination Acts and trusting to persuasion will not lessen this state in any way.

It would seem that in a case of a widespread epidemic some form of compulsion would be necessary. There might be difficulties owing to the size of the problem, but these could be overcome.

## CANCER.

There were 67 deaths from cancer during the year—40 males and 27 females. The age distribution is interesting as rather more than half the total number of cases occurred in age groups of 65 years and over.

On a careful investigation of the various sites no indication was found that any particular organ or group of organs was affected more than others.

There is a Radium Department at the Royal Infirmary with a consultant from the Manchester Radium Institute who attends regularly. Within the last year arrangements have been made to instal a Deep X-Ray Therapy and it is hoped to treat deep-seated cancer which has hitherto proved very intractable, with rather more success.

Recent investigations have rather favoured the combination of radium and Deep X-Ray Therapy, and it will be interesting to observe the results.

## OPHTHALMIA NEONATORUM.

| Notified. | Cases Treated. |              | Vision Unimpaired. | Vision Impaired. | Total Blindness. | Deaths. |
|-----------|----------------|--------------|--------------------|------------------|------------------|---------|
|           | At Home.       | In Hospital. |                    |                  |                  |         |
| 2         | 1              | 1            | 2                  | —                | —                | —       |





## TUBERCULOSIS, 1932.

Particulars of new cases of tuberculosis and mortality during 1932 are given below.

| Age Periods.   | NEW CASES. |         |                |         | DEATHS.    |         |                |         |
|----------------|------------|---------|----------------|---------|------------|---------|----------------|---------|
|                | Pulmonary  |         | Non-Pulmonary. |         | Pulmonary. |         | Non-Pulmonary. |         |
|                | Males      | Females | Males          | Females | Males      | Females | Males          | Females |
| Under 1 ...    | 0          | 0       | 0              | 0       | 0          | 0       | 0              | 0       |
| 1 to 5 ...     | 1          | 0       | 2              | 0       | 0          | 0       | 1              | 1       |
| 5 to 10 ...    | 0          | 2       | 4              | 0       | 0          | 0       | 1              | 0       |
| 10 to 15 ...   | 0          | 1       | 0              | 0       | 0          | 1       | 0              | 0       |
| 15 to 20 ...   | 3          | 2       | 1              | 0       | 0          | 1       | 0              | 0       |
| 20 to 25 ...   | 1          | 3       | 0              | 0       | 0          | 1       | 0              | 0       |
| 25 to 35 ...   | 10         | 4       | 1              | 0       | 6          | 1       | 0              | 0       |
| 35 to 45 ...   | 4          | 3       | 0              | 1       | 5          | 0       | 0              | 0       |
| 45 to 55 ...   | 5          | 1       | 0              | 0       | 4          | 2       | 0              | 0       |
| 55 to 65 ...   | 3          | 2       | 0              | 0       | 2          | 1       | 0              | 0       |
| 65 and upwards | 1          | 0       | 0              | 0       | 1          | 0       | 0              | 0       |
| Totals ...     | 28         | 18      | 8              | 1       | 18         | 7       | 2              | 1       |
| 1932           | 46         |         | 9              |         | 25         |         | 3              |         |

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS)  
REGULATIONS, 1925.

There has been no occasion to act on this regulation.

PUBLIC HEALTH ACT, 1925, SECTION 62.

So far there has been no occasion to put this Section into force.

# CITY AND COUNTY OF THE CITY OF CHESTER.—Causes of, and Ages at Death during the Year 1932.

50

| CAUSES OF DEATH. |                                |     |     |     |     |     |     |     |     |     |     |     |     | NET DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT. |               |                |                |                 |                  |                  |                  |                  |                  |                  |                  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     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|                  |                                |     |     |     |     |     |     |     |     |     |     |     |     | At all Ages.  | Under 1 year. | 1 and under 2. | 2 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 35. | 35 and under 45. | 45 and under 55. | 55 and under 65. | 65 and under 75. | 75 and up-wards. |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     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|     |     |     |     |     |     |     |     |     |     |     |
| 1                | Typhoid and Paratyphoid Fevers | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...   | ...           | ...            | ...            | ...             | ...              | ...              | ...              | ...              | ...              | ...              | ...              | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 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# Infant Mortality during the Year 1932.

| CAUSES OF DEATH.                           |    | Under 1 Week | 1-2 Weeks | 2-3 Weeks | 3-4 Weeks | Total Deaths<br>4 Weeks | 4 Weeks and<br>under 3 Months | 3 Months and<br>under 6 Months | 6 Months and<br>under 9 Months | 9 Months and<br>under 12 Months | Total<br>Deaths<br>under<br>1 Year |
|--|----|--------------|-----------|-----------|-----------|-------------------------|-------------------------------|--------------------------------|--------------------------------|---------------------------------|------------------------------------|
| All Causes {<br>Certified.<br>Uncertified. |    | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Small-pox ..                               | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Chicken pox ..                             | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Measles ..                                 | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Scarlet Fever ..                           | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Whooping Cough ..                          | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Diphtheria and Croup ..                    | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Erysipelas ..                              | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Tuberculous Meningitis ..                  | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Abdominal Tuberculosis (b) ..              | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Other Tuberculosis Diseases ..             | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Meningitis ( <i>not Tuberculous</i> ) ..   | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Convulsions ..                             | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Laryngitis ..                              | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Bronchitis ..                              | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Pneumonia (all forms) ..                   | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Diarrhoea ..                               | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Enteritis ..                               | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Gastritis ..                               | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Syphilis ..                                | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Rickets ..                                 | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Suffocation, Overlying ..                  | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Injury at Birth ..                         | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Atelectasis ..                             | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Congenital Malformations (c) ..            | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Premature Births ..                        | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Atrophy, Debility and Marasmus ..          | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Other Causes ..                            | .. | ..           | ..        | ..        | ..        | ..                      | ..                            | ..                             | ..                             | ..                              | ..                                 |
| Totals ..                                  | .. | 10           | 2         | 1         | ..        | 13                      | 9                             | 6                              | 6                              | 3                               | 37                                 |

Nett Births in the year, legitimate, 651; illegitimate, 35.

Nett Deaths in the year of legitimate infants, 34; illegitimate infants, 3.

# Vital Statistics of Whole District during 1932 and previous years.

| YEAR | Population<br>estimated to<br>Middle of each<br>Year | BIRTHS                     |      | TOTAL DEATHS<br>REGISTERED<br>IN<br>THE DISTRICT |      | TRANSFERABLE<br>DEATHS                                   |   | NETT DEATHS BELONGING TO THE DISTRICT |                                    |             |      |       |
|------|--|----------------------------|------|--|------|--|---|---------------------------------------|------------------------------------|-------------|------|-------|
|      |  | Un-<br>corrected<br>Number | Nett | Number<br>‡                                      | Rate | Of Non-<br>residents<br>registered<br>in the<br>District | Of Resi-<br>dents not<br>registered<br>in the<br>District | Under 1 Year of Age                   |                                    | At all Ages |      |       |
|      |  |                            |      |  |      |  |   | Number<br>‡                           | Rate<br>per<br>1000<br>Nett Births | Number<br>‡ | Rate |       |
|      |  |                            |      |  |      |  |   |                                       |                                    |             |      |       |
| 1    | 2  | 3                          | 4    | 5  | 6    | 7  | 8   | 9                                     | 10                                 | 11          | 12   | 13    |
| 1923 | 41,610   | 829                        | 800  | 19'22  | 600  | 14'41  | 132   | 78                                    | 69                                 | 86'2        | 546  | 13'12 |
| 1924 | 41,932   | 835                        | 816  | 19'46  | 578  | 13'78  | 116   | 115                                   | 73                                 | 89'46       | 577  | 13'76 |
| 1925 | 41,922   | 869                        | 851  | 20'30  | 593  | 14'12  | 155   | 128                                   | 61                                 | 71'6        | 566  | 13'5  |
| 1926 | 41,913   | 873                        | 836  | 19'94  | 569  | 13'31  | 136   | 113                                   | 67                                 | 80'0        | 546  | 13'0  |
| 1927 | 42,200   | 764                        | 697  | 16'51  | 552  | 13'08  | 139   | 113                                   | 49                                 | 70'30       | 526  | 12'46 |
| 1928 | 40,982   | 791                        | 696  | 16'9   | 554  | 13'51  | 190   | 103                                   | 41                                 | 58'9        | 467  | 16'8  |
| 1929 | 40,920   | 805                        | 707  | 17'25  | 689  | 16'83  | 211   | 148                                   | 55                                 | 77'7        | 626  | 14'3  |
| 1930 | 40,910   | 798                        | 667  | 16'3   | 616  | 15'5   | 172   | 141                                   | 48                                 | 71'96       | 585  | 13'60 |
| 1931 | 41,380   | 799                        | 671  | 16'11  | 595  | 14'37  | 196   | 147                                   | 46                                 | 68'5        | 546  | 12'47 |
| 1932 | 41,350   | 804                        | 686  | 16'5   | 592  | 14'31  | 205   | 150                                   | 37                                 | 53'9        | 537  | 12'98 |

Area of District in acres (land and inland water), 2,862

No. of inhabited houses, 9,967. Average No. of persons per house, 4'15.

\* Total deaths occurring in Chester whether of residents or non-residents.

† Births and deaths corrected for those births and deaths properly belonging to Chester, but occurring outside the District, or occurring in the District but properly belong outside.



# Administration of the Factory and Workshop Acts, 1901 & 1907

IN CONNECTION WITH

## Factories, Workshops, Laundries, Workplaces, and Homework.

### 1. INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF  
NUISANCES.

| Premises.<br>(1)                             | Number of          |                           |                     |
|--|--------------------|---------------------------|---------------------|
|  | Inspections<br>(2) | Written<br>Notices<br>(3) | Prosecutions<br>(4) |
| Factories (including Factory Laundries) ...  | 14                 | 2                         | —                   |
| Workshops (including Workshop Laundries) ... | 104                | 4                         | —                   |
| Workplaces (other than Outworkers' premises) | —                  | —                         | —                   |
| Total ... ..                                 | 118                | 6                         | —                   |

### 2. DEFECTS FOUND.

| Particulars.<br>(1)                          | No. of Defects. |                |   | Number<br>of<br>Prosecu-<br>tions.<br>(5) |
|--|-----------------|----------------|---|---|
|  | Found<br>(2)    | Remed'd<br>(3) | Referred<br>to H.M.<br>Inspect'r<br>(4) |   |
| Nuisances under the Public Health Acts—      |                 |                |   |   |
| Want of Cleanliness ... ..                   | 14              | 14             | —                                       | —   |
| Want of Ventilation ... ..                   | —               | —              | —                                       | —   |
| Overcrowding ... ..                          | —               | —              | —                                       | —   |
| Want of drainage of floors ... ..            | —               | —              | —                                       | —   |
| Other Nuisances ... ..                       | 5               | 5              | —                                       | —   |
| Sanitary accommodation { insufficient ... .. | 1               | 1              | —                                       | —   |
| { unsuitable or defective ... ..             | —               | —              | —                                       | —   |
| { not separate for sexes ... ..              | 1               | 1              | —                                       | —   |
| Offences under the Factory & Workshop Act :  |                 |                |   |   |
| Other Offences ... ..                        | —               | —              | —                                       | —   |
| Total ... ..                                 | 21              | 21             | Nil                                     | Nil                                       |

### OUTWORK IN UNWHOLESOME PREMISES.

SECTION 108.

| Nature of Work.<br>(1)      | Instances.<br>(2) | Notices<br>Served.<br>(3) | Prosecutions<br>(4) |
|-----------------------------|-------------------|---------------------------|---------------------|
| Wearing Apparel.—           |                   |                           |                     |
| Making, &c, ... ..          | Nil               | Nil                       | Nil                 |
| Cleaning and Washing ... .. | "                 | "                         | "                   |

